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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/106,519	06/29/1998	KEITH MCCLOUGHRIE	CIS-044	6843

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EXAMINER

PHUNKULH, BOB A

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 06/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/106,519

Applicant(s)

MCCLOGHRIE ET AL.

Examiner

Bob A. Phunkulh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-7 and 9-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7 and 9-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Request for Continued Examination

The request filed on 5/10/2002 for a Request for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 09/106,519 is acceptable and a RCE has been established. An action on the RCE follows.

This communication is in response to applicant's 5/10/2002 amendment/responses in the application of **McCLOGHRIE et al.** for "**SAMPLING PACKETS FOR NETWORK MONITORING**" filed 06/29/1998. The amendments/response to the claims have been entered. No claims have been canceled. Claims 23-28 have been added. Claims 1-3, 5-7, 9-28 are now pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Phaal (US 5,315,580).

Regarding claims 1 and 2, Phaal discloses a network monitoring device includes a receive means for detecting and receiving message packets carried on a network, a sampling means for selecting a number of packets detected by the receive means, and a processing means for collecting and processing data from packets selected by the

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sampling means (**see col. 1 lines 62 to col. 2 line 39**). It should be note that sampling data packets allows maintaining the monitoring device load constant despite substantial variation in network traffic.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 5-6, 7, 9-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phaal.

Regarding claims 3, 5-6, 7, 9-28 , Phaal discloses a network monitoring device includes a receive means for detecting and receiving message packets carried on a network (*an input port for receiving network packets*), a sampling means for selecting a number of packets detected by the receive means (*a sampling element for selecting a fraction of those packets for review*), and a processing means for collecting and processing data from packets selected by the sampling means; wherein the sampling means select packets in a deterministic manner either on the basis of selecting every nth packet or on the basis of selecting the first packet detected after a fixed interval (**see col. 1 lines 62 to col. 2 line 39**). It should be note that sampling data packets allow maintaining the monitoring device load constant despite substantial variation in network traffic.

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In addition, Phaal discloses the size (*threshold*) of the receive and transmit FIFO buffers 25 and 26 can be quite small, for example sufficient to hold only two or three entries (**see col. 5 line 66 to col. 6 line 12**); and the collected packets sent out by the monitoring devices 12 over the network are all received by the measurement station 13 which stores these packets and carries out subsequent processing and analysis (**see col. 6 line 27 to col. 7 line 37**).

Furthermore, Phaal discloses the random selection of received packet header is based on the predetermined random counts stored in ROM 22 (see col. 4 lines 57-59). Also, the random numbers may be generated by the processor 21 (see col. 6 lines 30-43). The operation performed by the processor 21 is shown in figure 4. The combination of steps 41-47, processor 21 generates the random count value based on the threshold value of RX FIFO (step 46 and step 44).

Phaal fails to disclose the network monitoring device includes a packet-type detector coupled to the queue; and a frequency measurement element coupled to the packet-type detector.

However, it would have been obvious to one having ordinary skilled in the art at the time of invention was made to detects packet type and determine the frequent transmission of a particular type of packet in the system when processing and analyzing the collected packets by the measurement station 13 for monitoring a network which supports multiple standards i.e. ATM, IP, Frame Relay, Ethernet, etc...

Response to Arguments

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Applicant's arguments filed 5/10/2002 have been fully considered but they are not persuasive.

In page 9 the Applicant argued that:

Applicants respectfully direct the Examiner's attention to the fact that this claim requires that the feedback element is for **adaptively altering** a faction of packets for review and that the feedback element is **responsive to a length of a queue** of selected packets. Applicants have carefully studied Phaal and do not see anything in Phaal that discloses or suggests either of these features.

The mere fact that Phaal and the specification for the invention use a similar variable (i.e., "nth" and N) does not alleviate the requirement that Phaal disclose or suggest these recited claim features. In particular, Phaal does not disclose adaptively altering the value of n, let alone a feedback element that adaptively alters the value responsive to a length of a queue of selected packets.

In response to the above arguments, Phaal discloses the following in col. 6 lines 27-43 that:

The data structures used to implement the receive and transmit FIFO buffers 25 and 26, respectively in RAM 23 will be apparent to a person skilled in the art and will therefore not be described herein. Furthermore, it will be appreciated that although in the FIG. 3 embodiment the random selection of incoming packets has been effected by storing predetermined random numbers in ROM 22, **these random numbers could alternatively be generated by the processor 21** (although this is not preferred as it places extra processor requirements on the microprocessor). Preferably, the random numbers are such as to give an average skip between selected packets of ninety nine; other values may be more appropriate depending on traffic density, sampling period and acceptable statistical error level. The random selection of packets could be effected on a time basis rather than on the number of packets received.

Furthermore, Phaal discloses the random selection of received packet header is based on the predetermined random counts stored in ROM 22 (see col. 4 lines 57-59). Also, the random numbers may be generated by the processor 21 (see col. 6 lines 30-43). The operation performed by the processor 21 is shown in figure 4. The

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combination of steps 41-47, processor 21 generates the random count value based on the threshold value of RX FIFO (step 46 and step 44) –thus processor 21 functions the same as claimed subject matter especially **adaptively altering** a faction of packets for review and that the feedback element is **responsive to a length of a queue** of selected packets.

Conclusion

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 305-9051, (for formal communications intended for entry)

Or:

(703) 308-5403 (for informal or draft communications, please labels

“PROPOSED” or “DRAFT”)

Hand-delivered responses should be brought to Crystal Park II, 2021

Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bob A. Phunkulh** whose telephone number is **(703) 308-8251**. The examiner can normally be reached on Monday-Friday from 8:00 A.M. to 4:00 P.M.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor **Douglas W. Olms**, can be reach on **(703) 305-4703**. The fax phone number for this group is **(703) 872-9314**.

Bob A. Phunkulh

Bob A. Phunkulh

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May 29, 2002

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